

FIG. 6

PARTIAL DNA SEQUENCE FOR THE PLASMID FOR INSERTION INTO YEAST
IN WHICH: NUCLEOTIDE NOS. 1-173 MAKEUP THE MF 1 PROMOTER
REGION AND 5' NONCODING SEQUENCE. 174-440 IS THE MF 1 N-TERMINAL
CODING SEQUENCE. 441-695 IS AN HPTH SEQUENCE. 696-726 IS AN
HPTH 3' NONCODING SEQUENCE FROM pSSHPTH-10. 727-732 IF FROM
pUC19. 733-874 IS MF 1 3' NONCODING SEQUENCE AND TRANSCRIPTIONAL
TERMINATION SIGNAL

| | | |
|---|-----|-----|
| 10 | 30 | |
| AGTGCAAGAAAACCAAAAGCAACAACAGGTTTGGATAAGTACATATATAAGAGGGCT | | |
| 70 | 90 | 110 |
| TTTGTCCCATCAAAATGTTACTGTTCTACGATTACATTACGATTCAAGAATAGTTCA | | |
| 130 | 150 | 170 |
| AACAAGAAGATTACAAACTATCAATTCATACACAATATAAACGACCAAAAGAACATGAGAT | | |
| 190 | 210 | 230 |
| TTCCTTCATTTTACTGCAGTTTATTGCAGCATCCTCCGCATTAGCTGCTCCAGTCA | | |
| 250 | 270 | 290 |
| ACACTACAAACAGAAGATGAAACGGCACAAATTCCGGCTGAAGCTGTATCGGTTACTCAG | | |
| 310 | 330 | 350 |
| ATTTAGAAGGGGATTCGATGTTGCTGTTGCCATTTCCAACAGCACAAATAACGGGT | | |
| 370 | 390 | 410 |
| TATTGTTATAAATACTACTATTGCCAGCATTGCTGCTAAAGAAGAAGGGGTATCTTGG | | |
| 430 | 450 | 470 |
| ATAAAAGAGAGGCTGAAGCTWSNGTNWSNGARATHCARYTNATGCAYAAYTNGGNAARC | | |
| 490 | 510 | 530 |
| AYYTNAAYWSNATGGARMGNNTNGARTGGYTNMGNAARAARYTNCARGAYGTNCAYAAYT | | |
| 550 | 570 | 590 |
| TYGTNGCNYTNGGNGCNCCNYTNGCNCCNMNGNAYGCNGGNWSNCARMGNCCNMGNAARA | | |
| 610 | 630 | 650 |
| ARGARGAYAAYGTYNTNGTNGARWSNCAYGARAARWSNYTNGGNGARGCNGAYAARGCNG | | |
| 670 | 690 | 710 |
| AYGTNAAYGTYTNACNAARGCNAARWSNCARTRRAATGAAAACAGATATTGTCAGAGT | | |
| 730 | 750 | 770 |
| TCTGCTCTAGAGTCGACTTGTCCCACGTACTTTAGCTCGTACAAATACAATATAC | | |
| 790 | 810 | 830 |
| TTTCATTCTCGTAAACAACCTGTTCCATGTAATATCCTTTCTATTTCGTT | | |
| 850 | 870 | |
| CGTTACCAACTTACACATACTTATATAGCTAT, WHEREIN | | |

M = A OR C

R = A OR G

W = A OR T

S = C OR G

Y = C OR T

H = A OR C OR T

N = A OR G OR C OR T

FIG. 7

NUCLEOTIDE SEQUENCE OF THE MF 1-HPTH FUSION GENE FROM pS LX5-HPTH1.
NUCLEOTIDE NOS. 1-173 MAKEUP THE MH 1 PROMOTER REGION AND 5'
NONCODING SEQUENCE. 174-440 IS THE MF 1 N-TERMINAL CODING
SEQUENCE. 441-695 IS THE HPTH SEQUENCE OBTAINED FROM pSSHPTH-10.
696-726 IS AN HPTH 3' NONCODING SEQUENCE FROM pSSHPTH-10. 727-732
IS FROM pUC19. 733-874 IS MF 1 3' NONCODING SEQUENCE AND
TRANSCRIPTIONAL TERMINATION SIGNAL

| | | |
|---|-----|-----|
| 10 | 30 | 50 |
| AGTGCAAGAAAACCAAAAGCAACAACAGGTTGGATAAGTACATATATAAGAGGGCT | | |
| 70 | 90 | 110 |
| TTTGTCCCATTCAAAATGTTACTGTTCTACGATTCAATTACGATTCAAGAATAGTTCA | | |
| 130 | 150 | 170 |
| AACAAGAAGATTACAAACTATCAATTCTACACAATATAAACGACCAAAAGAATGAGAT | | |
| 190 | 210 | 230 |
| TTCCTTCAATTTTACTGCAGTTTATTGCAGCATCCTCCGATTAGCTGCTCCAGTC | | |
| 250 | 270 | 290 |
| ACACTACAAACAGAAGATGAAACGGCACAAATTCCGGCTGAAGCTGTACCGTTACTCAG | | |
| 310 | 330 | 350 |
| ATTTAGAAGGGGATTCGATGTTGCTGTTGCCATTTCACAGCACAAATAACGGGT | | |
| 370 | 390 | 410 |
| TATTGTTATAAACTACTATTGCCAGCATTGCTGCTAAAGAAGAAGGGGTATCTTG | | |
| 430 | 450 | 470 |
| ATAAAAGAGAGGCTGAAGCTCTGTGAGTGAAATACAGCTTATGCATAACCTGGAAAC | | |
| 490 | 510 | 530 |
| ATCTGAACTCGATGGAGAGAGTAGAATGGCTGCGTAAGAAGCTGCAGGATGTGACAATT | | |
| 550 | 570 | 590 |
| TTGTTGCCCTGGAGCTCCTAGCTCCAGAGATGCTGGTCCAGAGGCCGGAAAAAA | | |
| 610 | 630 | 650 |
| AGGAAGACAATGTCCTGGTTGAGAGCCATGAAAAAAGTCTGGAGAGGCAGACAAAGCTG | | |
| 670 | 690 | 710 |
| ATGTGAATGTATTAACTAAAGCTAAATCCCAGTGAAATGAAAACAGATATTGTCAGAGT | | |
| 730 | 750 | 770 |
| TCTGCTCTAGAGTCGACTTGTCCCAGTGACTTTAGCTCGTACAAATACAATATAC | | |
| 790 | 810 | 830 |
| TTTCATTCTCCGTAAACAAACCTGTTCCCATGTAATATCCTTCTATTTCGTT | | |
| 850 | 870 | |
| CGTTACCAACTTACACATACTTATAGCTAT | | |

FIG. 10A

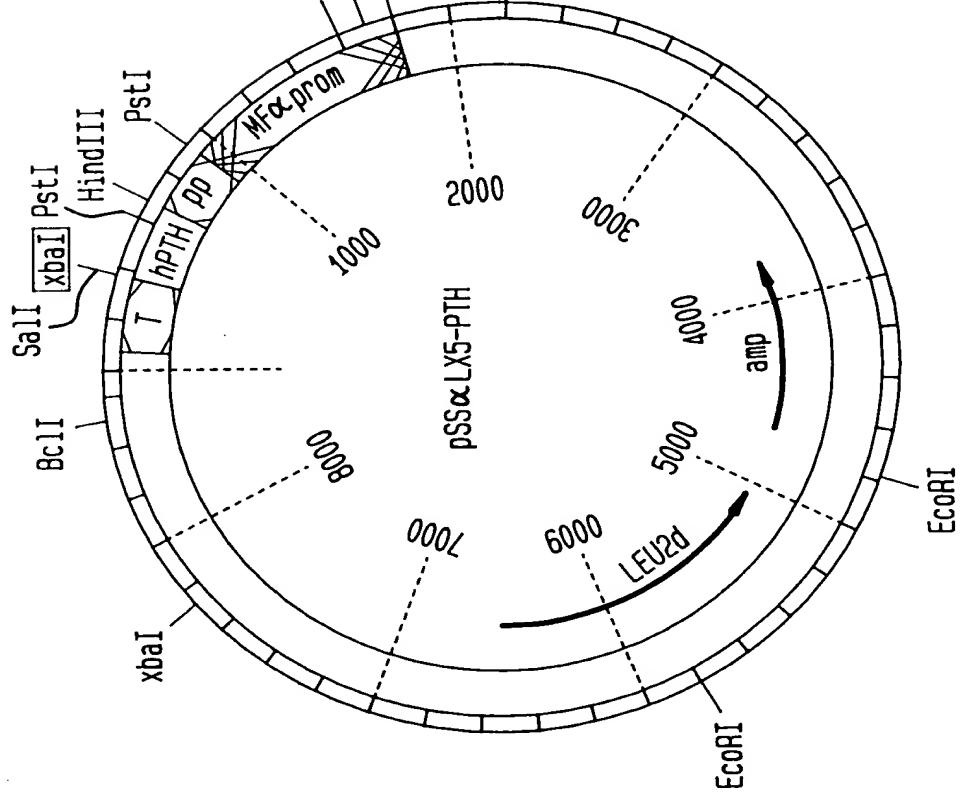
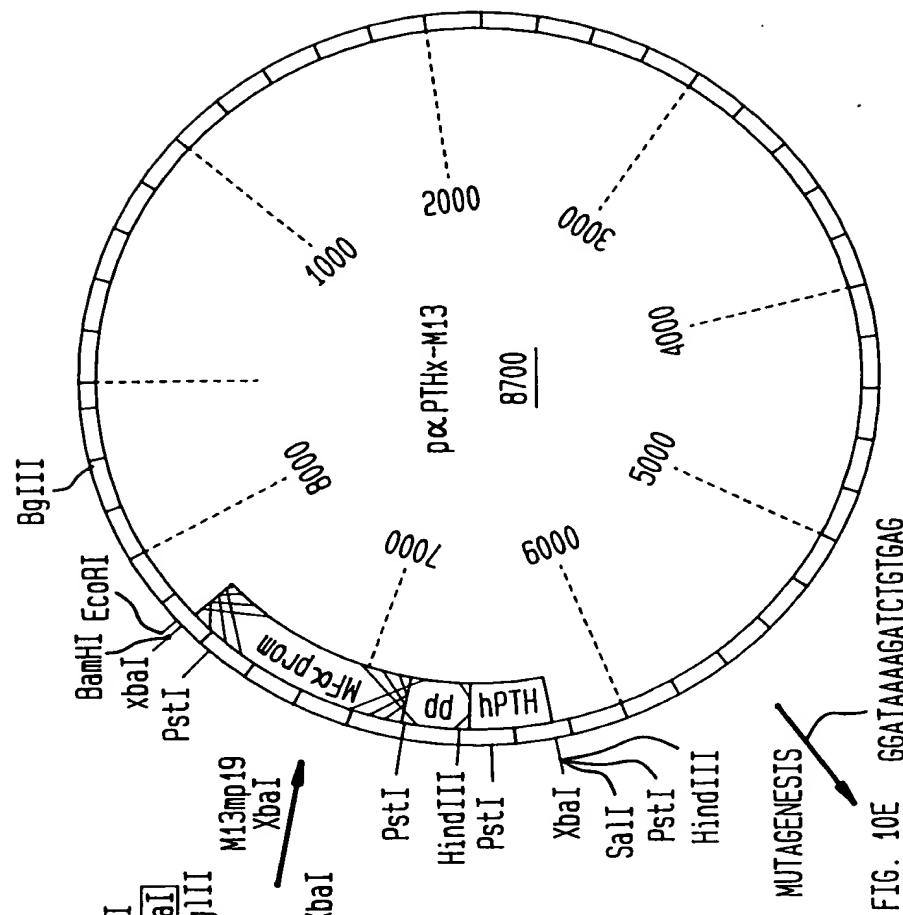


FIG. 10B



TO FIG. 10E GGATAAAAAGATCTGTGAAG

FIG. 10C

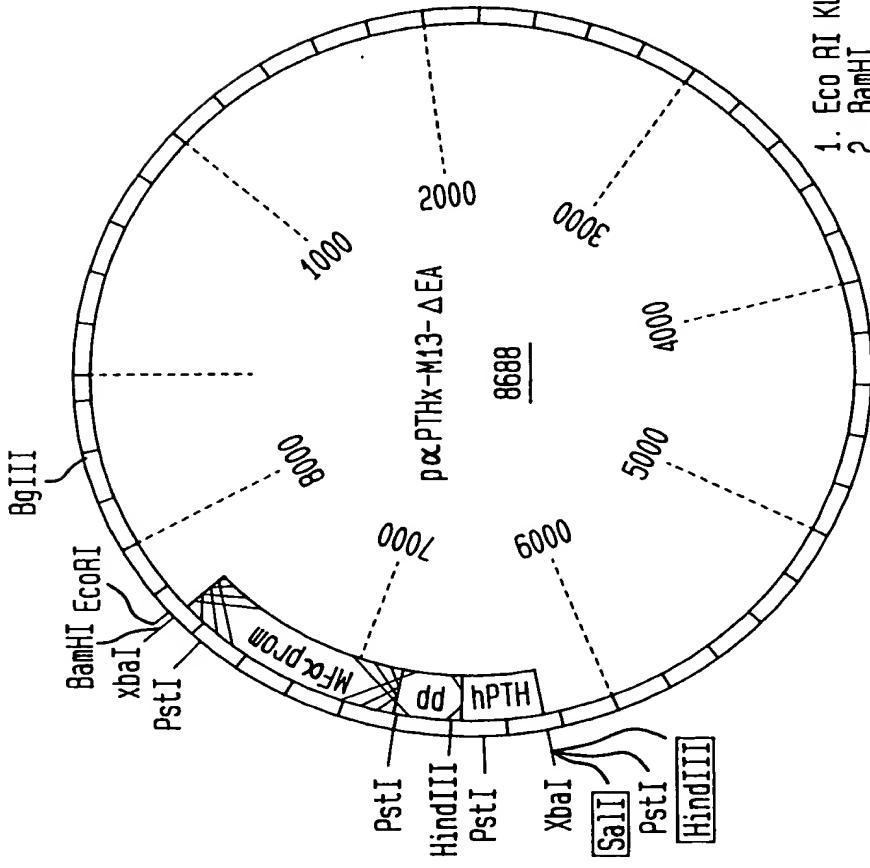
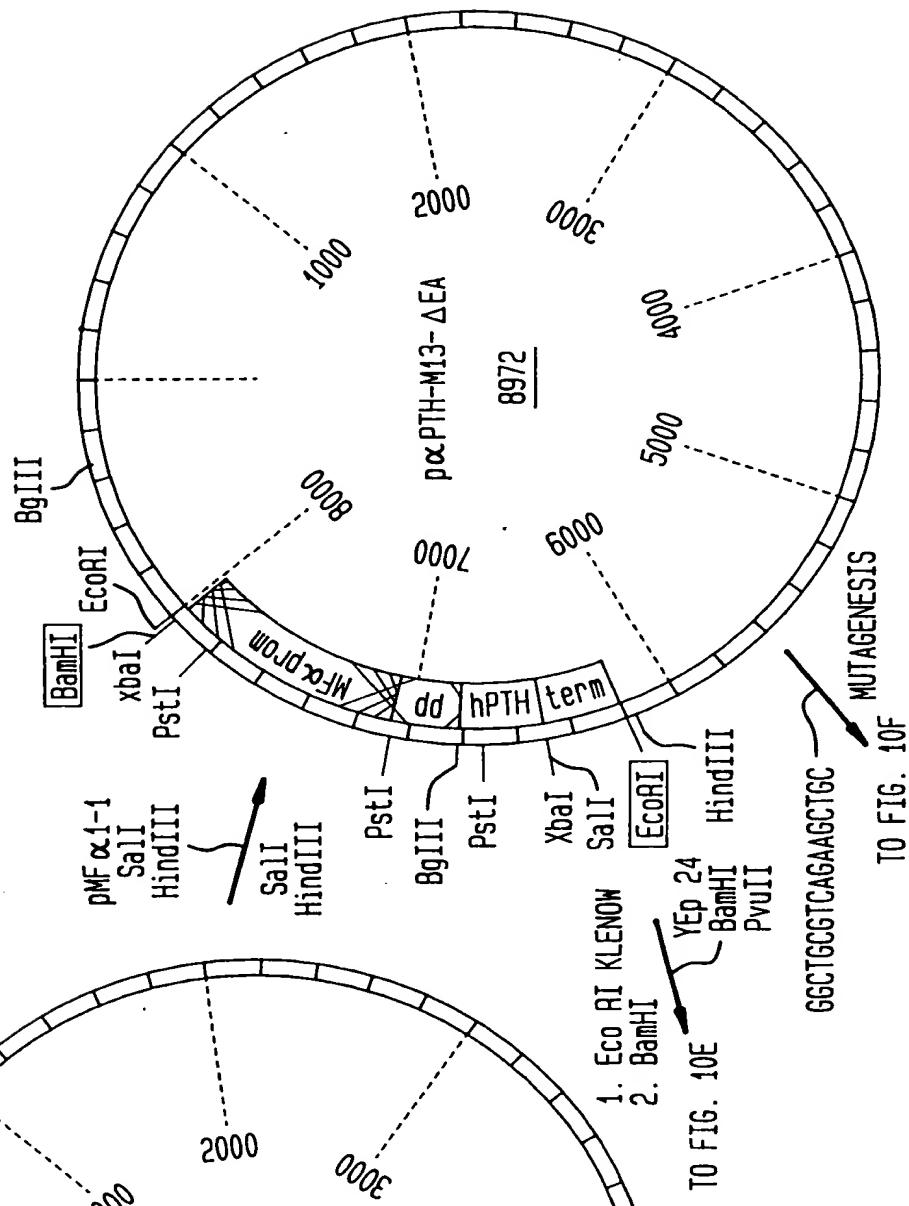


FIG. 10D



MUTAGENESIS
GGCTGGCTAGAGCTGCC
TO FIG. 10F

TO FIG. 10E

FIG. 10E

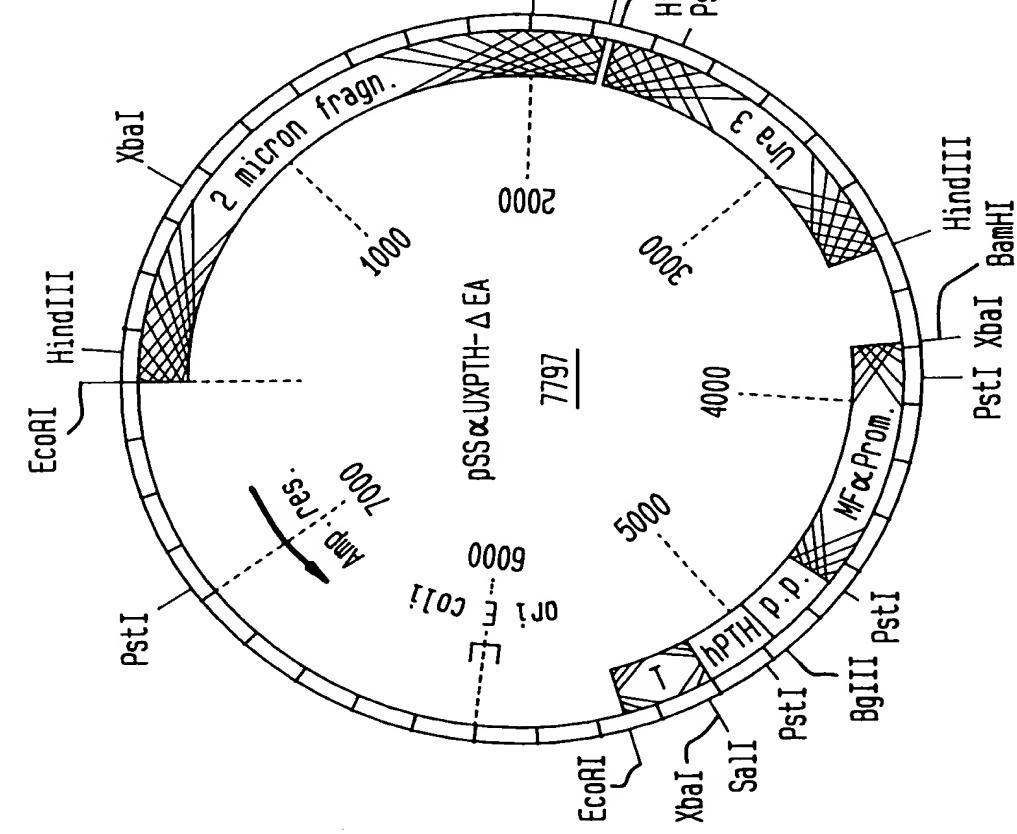


FIG. 10F

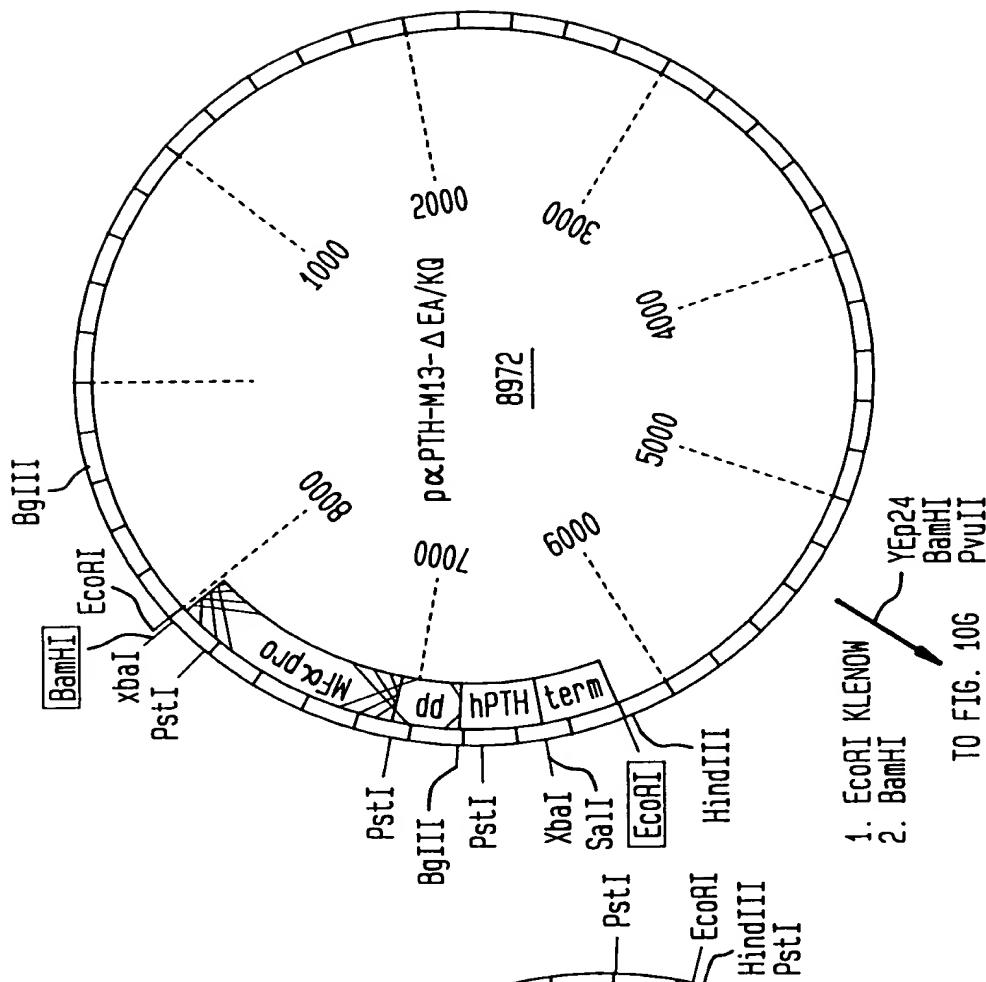


FIG. 106

